CLAIMS

1. An electrical switching device comprising an ingoing (1) and an outgoing (2) conductor and an arrangement for connecting and disconnecting the conductors by means of an axial movement, characterized in that

- the switching device comprises a second outgoing conductor (3),
- said arrangement comprises an axially movable element (5, 58), said element being movable between a first and a second position, and
- the device is arranged such that when the axially movable element (5, 58) is in the first position, the ingoing conductor (1) and the first outgoing conductor (2) are electrically connected and the ingoing conductor (1) and the second outgoing conductor (3) are disconnected, and when the axially movable element (5, 58) is in the second position, the ingoing conductor (1) and the first outgoing conductor (2) are disconnected and the ingoing conductor (1) and the second outgoing conductor (3) are electrically connected.

2. An electrical switching device according to claim 1, characterized in that the ingoing conductor (1) is connected to the first outgoing conductor (2) via a first middle-piece (10) having an electrically insulating portion (13), that the ingoing conductor (1) is connected to the second outgoing conductor (3) via a second middle-piece (11) having an electrically insulating portion (14), and that said insulating portions (13, 14) are axially displaced relative to each other.

3. An electrical switching device according to claim 1 or 2, characterized in that each of said middle-pieces (10, 11) comprises conducting portions (15, 16, 17, 18) arranged on opposite sides of each insulating portion (13, 14).

4. An electrical switching device according to claim 2 or 3, characterized in that the axially movable element (5, 58) comprises a first (20) and a second (21) contact member, and that the axial position of the contact members (20, 21) relative to said insulating portions (13, 14) determines whether the ingoing conductor (1) is electrically connected or disconnected to the first (2) or second (3) outgoing conductor.

5. An electrical switching device according to claim 4, characterized in that the axially movable element (5, 58) comprises at least four gland seals (37) arranged on opposite sides of the first and the second contact member.

6. An electrical switching device according to claim 4 or 5, characterized in that the first (20) and the second (21) contact member are essentially tubular, that the longitudinal axis of the first contact member (20) and the longitudinal axis of the first middle-piece (10) are arranged coaxially, and that the longitudinal axis of the second contact member (21) and the longitudinal axis of second middle-piece (11) are arranged coaxially.

7. An electrical switching device according to any of the claims 2-6, characterized in that the ingoing conductor (1) comprises a first conductor element (8) linearly displaced relative to the first outgoing conductor (2) and a second conductor element (7) linearly displaced relative to the second outgoing conductor (3) and that said middle-pieces (10, 11) are provided within the space between the conductor elements (7, 8) and the outgoing conductors (2, 3).

8. An electrical switching device according to any of the previous claims, characterized in that the first ingoing conductor (51) is adapted for providing electrical power of a first phase, that the device comprises a second ingoing conductor (52) adapted for providing electrical power of a second phase, a third and a fourth outgoing conductor, and that the device is arranged such

that when the axially movable element is in the first position, the second ingoing conductor and the third outgoing conductor are connected and the second ingoing conductor and the fourth outgoing conductor are disconnected and when the axially movable element is in the second position, the second ingoing conductor and the third outgoing conductor are disconnected and the second ingoing conductor and the fourth outgoing conductor are connected.

9. An electrical switching device according to claim 8, characterized in that the device comprises a third ingoing conductor (53) adapted for providing electrical power of a third phase, a fifth and a sixth outgoing conductor, and that the device is arranged such that when the axially movable element (58) is in the first position, the third ingoing conductor and the fifth outgoing conductor are connected and the third ingoing conductor and the sixth outgoing conductor are disconnected and when the axially movable element is in the second position, the third ingoing conductor and the fifth outgoing conductor are disconnected and the third ingoing conductor and the sixth outgoing conductor are connected.

10. An electrical switching device according to any of the preceding claims, characterized in that said arrangement comprises an actuator element (26, 28) for hydraulically moving said axially movable element.

11. An electrical switching device according to any of the preceding claims, characterized in that the first (2) and the second (3) outgoing conductor are adapted for being alternately connected to a first and a second electrical unit, which units are redundant, and that the conductors are adapted for supplying power to the circuits.

12. An electrical switching device according to any of the preceding claims, characterized in that it is arranged submerged in a dielectric medium.

13. An electrical switching device according to claim 12, characterized in that said dielectric medium is an isolating mineral or synthetic oil.

14. An electrical switching device according to claim 12 or 13, characterized in that the movable element (5, 58) is provided with at least one passage (38, 62) for transportation of said dielectric medium through the movable element.

15. Use of a device according to any of the claims 1–14 for subsea electrical power distribution applications.

16. A method for connecting and disconnecting at least one ingoing conductor and at least two outgoing electrical conductors, comprising:

- moving an axially movable element from a first position to a second position, thereby disconnecting the ingoing conductor and the first outgoing conductor and connecting the ingoing conductor and the second outgoing conductor, and
- moving the axially movable element from the second position to the first position, thereby disconnecting the ingoing conductor and the second outgoing conductor and connecting the ingoing conductor and the first outgoing conductor.

17. A method according to claim 16, whereby electrical power of a first phase is provided by the first ingoing conductor, electrical power of a second phase being provided by a second ingoing conductor, and during said movement of said element from the first position to the second position, the second ingoing conductor and a third outgoing conductor are disconnected and the second ingoing conductor and a fourth outgoing conductor are connected, and during said movement of said element from the

second position to the first position, the second ingoing conductor and the third outgoing conductor are connected and the second ingoing conductor and the fourth outgoing conductor are disconnected.

18. A method according to claim 17, whereby electrical power of a third phase being provided by a third ingoing conductor, and during said movement of said element from the first position to the second position, the third ingoing conductor and a fifth outgoing conductor are disconnected and the third ingoing conductor and a sixth outgoing conductor are connected, and during said movement of said element from the second position to the first position, the third ingoing conductor and the fifth outgoing conductor are connected and the third ingoing conductor and the sixth outgoing conductor are disconnected.